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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

MEHMOOD, JENNIFER

ART UNIT

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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/566,144	<b>Applicant(s)</b> BERGSMANN ET AL.	
	<b>Examiner</b> JENNIFER MEHMOOD	<b>Art Unit</b> 2612	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 25 April 2008.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1,4, 6-24 and 28-31 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,4, 6-24 and 28-31 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 April 2008 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

***Drawings***

1. The drawings (Figures 1-5) were received on April 25, 2008. These drawings are accepted by the Examiner.

***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1, 4, 6, 9, 11-13, 16, 17, 20-24, and 28-30 are rejected under 35 U.S.C. 102(e) as being anticipated by Niemiec et al. (US 2003/0063524).

For claim 1, Niemiec discloses a device for storing of at least one of a solid, a liquid or a gaseous object, the device comprising: at least one compartment configured to contain at least one object; an electrical data memory including at least one memory cell assigned to the compartment (parags 0065 and 0066); wherein one of placing the object in the compartment or removing the object from the compartment triggers an electrically readable signal (parags 0062 and 0065; Fig. 4, items 118, 402, 404); wherein the compartment is mechanically changeable for removal of the object from the compartment or placing the object in the compartment (severable conductors functioning as switches – parag 0065); wherein the electrically readable signal is

generated after a mechanical change of the compartment (parag 0065); wherein the memory cell adopts a memory value after the mechanical change of the compartment; and wherein the compartment forms a part of the memory cell (parag 0066).

For claim 4, Niemiec discloses the device further comprises evaluation electronics for reading the memory value from the electrical data memory (Fig. 4, item 404).

For claim 6, Niemiec discloses the compartment includes an interconnect, the interconnect being part of the memory cell, and being configured to be substantially destroyed after the mechanical change of the compartment (parag 0066 – series of internal circuits which may be broken through the application of the voltage exceeding the capability of the circuit).

For claim 9, Niemiec discloses the evaluation electronics comprise a shift register for reading the memory value from the electrical data memory (parags 0062 and 0065; Fig. 4, item 404).

For claim 11, Niemiec discloses an interface of the evaluation electronics, the interface having one or more contacts for providing data transmission (Fig. 4, items 402 and 404); and an external reader configured to provide data transmission through the one or more contacts of the interface (Fig. 4, item 404; parag 0065).

For claim 12, Niemiec discloses the evaluation electronics comprise a timer configured to generate information indicative of the time the compartment is mechanically changed (parags 0048 and 0059).

For claim 13, Niemiec discloses at least one of the memory cell or the evaluation electronics are integrated in a substrate of the device (parags 0058, 0059 and 0062).

For claim 16, Niemiec includes an assembly of layers, at least one of the layers of the assembly of layers being configured to be used for forming an electrical function (parag 0061; Fig. 1, item 118).

For claim 17, Niemiec discloses at least one of active electrical components or passive electrical components are integrated in the assembly of layers (parag 0061; Fig. 1, item 118).

For claim 20, Niemiec discloses the device is a pack, the pack having one or more compartments formed therein, and having the data memory and the evaluation electronics integrated in a substrate of the pack (parag 0062).

For claim 21, Niemiec discloses the substrate of the pack is configured to be a carrier for at least one of the interconnect or the evaluation electronics (parags 0061 and 0062).

For claim 22, Niemiec discloses the evaluation electronics are integrated in a chip having an integrated voltage source, the chip being attached to the pack (parags 0059, 0062, and 0066).

For claim 23, Niemiec discloses the device is a blister pack (parag 0011; Fig. 1, item 102).

For claim 24, Niemiec discloses the blister pack includes one or more blisters, each of the one or more blisters being configured to communicate with a memory cell (Fig. 4, items 118, 402, sensor interface and memory).

For claim 28, Niemiec discloses an interface of the evaluation electronics (Fig. 4, items 404, sensor interface), the interface being configured to provide data transmission (parag 0062); and an external reader configured to provide data transmission with the interface (Fig. 4, item 404).

For claim 29, Niemiec discloses the evaluation electronics being configured to store the time at which the compartment is mechanically changed (parag 0048).

For claim 30, Niemiec discloses the active electrical components includes at least one of one or more transistors or circuits formed from the one or more transistors, and wherein the passive electrical components includes at least one of one or more diodes, capacitors, inductors or resistors or circuits formed from the one or more diodes, capacitors, inductors or resistors (parags 0012, 0061; Fig. 1, item 118).

### ***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Niemiec et al. (US 2003/0063524).

Niemiec discloses evaluation electronics where a voltage is applied to the circuit and a terminal for serial data transmission. While Niemiec does not specifically disclose

a separate terminal for the voltage and the serial data transmission, it would have been an obvious design choice to provide a second, separate terminal for the voltage to ensure that proper data is transmitted without interference from external sources.

6. Claims 7 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Niemiec et al. (US 2003/0063524) and further in view of Parkhurst et al. (US 5,412,372).

Niemiec discloses a mechanical change of the compartment by breaking conductor 118; however, Niemiec does not disclose that the compartment forms a capacitance. Parkhurst, however, discloses that the compartment forms either a capacitance or inductance being substantially changed by breaking an object compartment (col 13, lns 33-59). It would have been obvious to one of ordinary skill in the art, at the time the invention was made to include a seal that triggers upon either an inductive or capacitive change thereby immediately sending a notification that the seal was ruptured to indicate tampering of the seal.

7. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Niemiec et al. (US 2003/0063524) and further in view of Gunnarsson (US 5,862,222).

Niemiec discloses the electrical data memory is a programmable read only memory, but Niemiec does not disclose the data memory to be a write once read only memory. Gunnarsson, however, uses a write once read only memory for the memory cell of a transponder (col 2, lns 58-62). It would have been obvious to include a write once read only memory so that during the manufacturing process, pertinent information is added to the transponder's memory without having anyone else alter the information (i.e. an end user).

8. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Niemiec et al. (US 2003/0063524) and further in view of Collins et al. (US 6,392,544).

Niemiec discloses a data memory, an interconnect, and evaluation electronics, but does not disclose that these components are formed of polymer electronics. Collins, however, includes components formed of polymer electronics (col 6, lns 24-39; Fig. 3, item 300). It would have been obvious to include components formed of polymer electronics to ensure a secure interconnection between organic and inorganic components on a substrate.

9. Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Niemiec et al. (US 2003/0063524) and further in view of Qiu et al. (US 6,696,953).

Niemiec discloses a substrate that includes conductive layers, but does not specifically disclose that the conductive layer is aluminum (parag 0061). Qiu, however, discloses conductive layers that include aluminum (Figs. 6 and 7; col 4, lns 48-59). It would have been obvious to include an aluminum layer to enhance conductivity properties to ensure proper signal communication.

10. Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Niemiec et al. (US 2003/0063524) and further in view of Beigel et al. (US 6,888,502).

Niemiec discloses a substrate with interconnects, but does not disclose that the substrate includes printed-on organics. Beigel, on the other hand, discloses a substrate that includes printed-on organics (col 6, lns 50-62; Fig. 1, item 32). It would have been obvious to include printed-on organics to reduce environmental waste.

11. Claim 31 is rejected under 35 U.S.C. 103(a) as being unpatentable over Niemiec et al. (US 2003/0063524) and further in view of Becker (US 5,508,684).

Niemiec discloses an interconnect integrated onto a base (Fig. 1, items 118, 120 and 102), but does not specifically disclose that the base is a substrate. Becker, on the other hand, discloses severable conductors disposed on a substrate (Fig. 1, item 43; col 4, lns 20-51; col 8, lns 1-8). It would have been obvious to one of ordinary skill in the art, at the time the invention was made to dispose the severable conductors disclosed by Niemiec, on a substrate, as disclosed by Becker, to provide a sound foundation for the conductor structure.

### ***Response to Remarks***

12. Applicant's arguments filed April 25, 2008 have been fully considered but they are not persuasive.

The Applicant argues as follows: On page 1 of the Remarks, Niemiec does not teach or suggest at least one memory cell assigned to the containment 20.

Furthermore, Niemiec only teaches a severable wire 118 associated with each containment 120 by which access to each containment 120 is detected by a sensor interface (shown in FIG. 1 of Niemiec).

The Examiner responds as follows: The sensor interface of Niemiec assigns a memory cell to each containment via severable conductors 118. Niemiec discloses evidence that each containment 110 does contain a memory cell by assigning a binary decimal code (BCD) identifying the location and status of each containment, wherein

the location and status of each containment is stored in memory - see BCD string in paragraphs 0065 and 0066.

### ***Conclusion***

13. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a). See MPEP § 706.07(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jennifer A Mehmood whose telephone number is (571) 272.2976. The examiner can normally be reached on M-F from 8:00am to 4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. George Bugg, can be reached at (571) 272.2998. The fax phone number for the organization where this application or proceeding is assigned is (571) 273.8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Jennifer A. Mehmood  
May 30, 2008

/George A Bugg/  
Acting SPE of Art Unit 2612